

Receiving Report

Date: 12/0/30
 Supplier: Ju M&L

Batch No: M/219/0
 Dart P/O: 17026

Packing Slip: Yes ☒ No ☐
 Invoice: Yes ☐ No ☒
 Receipt: Cash ☐ Cr ☐

Release Note Attached: Yes ☒ No ☐ N/A ☐
 Waybill Attached: Yes ☒ No ☐
 Shipment Complete: Yes ☒ No ☐ N/A ☐
 QC6 Inspection OK 12/06/01 N/A ☐
 Work Order N/A ☒

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments

Initials of receiver (if shipment OK) Level 12

Production/Adminr:
 Date: 12/0/30
 Received/Costing
 Initial

Location

Page 1 of 1

All amounts are calculated in domestic currency.

All Vendors **PO ID PO17026** **Receipt Dates from 5/30/2012 to 5/30/2012**

All Item ID/GL/WOs All Rec. Employees

Grouped by Vendor ID

Total Received Quantity:
Total Qty to Inspect (PO U/M):
Total Reject Quantity:
Total Receipt Value:
Total Balance Due Quantity:



PACKING SLIP

ORDER NO.: 60472166 FROM: CRAN PAGE 1

CUST NUMBER: 1203820 NET WGT:
SOLD TO:
DART AEROSPACE LTD
1270 ABERDEEN ST
HAWKESBURY ON
CANADA CN K6A 1K7

75.225 REQ.DATE: 05/30/12 CONFIRMED
SHIP TO:
DART AEROSPACE LTD
1270 ABERDEEN ST
HAWKESBURY ON
ONTARIO CANADA CN K6A 1K7

SALESPERSON: DONNA SMALLEY
TERMS: NET 30 DAYS
F.O.B.: SHIPPING POINT
CUST ORD NO.: PO17026

DISTRICT: CRANBURY
VIA: COMMON CARRIER
FREIGHT: PREPAID
RELEASE NO.:
RECEIVING PHONE:

LINE ITEM DESCRIPTION

WIDTH

LENGTH

0001 41930 D6061-T6 3/8 OD X .049 WA
QTY: 108.000 FT WT:

6.363 PC: 9 SHP: 108.000 FT

12 FT ML

PART#: M6061T6T0.375W.049

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: EAR99

Export License: NLR

Expiration Date: 0/00/00

PO:49256472 HT:546244

PC: 9

SLB/CL:334293

MLT:UNITED STATES MFG:UNITED STATES

0002 41723 D6061-T6 5/16 OD X .058 WA
QTY: 204.000 FT WT:

11.138 PC: 17 SHP: 204.000 FT

12 FT ML

PART#: M6061T6T0.3125W.058

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: EAR99

Export License: NLR

Expiration Date: 0/00/00

PO:49261460 HT:546273

PC: 17

SLB/CL:334821

MLT:UNITED STATES MFG:UNITED STATES

0003 33031 CDS 4130 6736
QTY: 200.000 FT

3/4 X .035

WT: 57.724 PC: 9 SHP: 216.000 FT

17/24 FT

PART#: M4130NT0.750W.035

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: 9A991.d

Export License: NLR

Expiration Date: 0/00/00

PO:49266125 HT:568913

PC: 9

SLB/CL:1569220

MLT:GERMANY

MFG:GERMANY

THANK YOU FOR THIS ORDER

TERMS AND CONDITIONS APPLICABLE TO THE SALE
OF THESE PRODUCTS ARE SET FORTH ON THE
REVERSE SIDE FOR YOUR CAREFUL REVIEW.



Control No: 146618

Precision Tube Company

A Mueller Industries Company

287 Wissahickon Avenue

North Wales, Pennsylvania 19454

Phone: (215) 699-5801 - Fax: (215) 699-0761

Quality Management System Registered to ISO 9001: 2008

CERTIFICATION AND TEST REPORTS

CUSTOMER PURCHASE ORDER NO.	CUST. ORD. NO.	PRECISION TUBE P/N
49256472 LINE 001	334293	24A037500490009

SOLD TO TW METALS
SUITE 204
760 CONSTITUTION DR.
EXTON, PA 19341

SHIP TO TW METALS - CRANBURY
27 ENGLEHARD DRIVE
MONROE TWP, NJ 08831

QUANTITY ORD	DESCRIPTION	QTY. SHIPPED	DATE SHIPPED
5,184 FT	METAL - 6061 ALUM TEMPER - T6 SPEC - AMS 4082P ASTM-B-210-04 AMS-WW-T-700/6B LENGTH - 12 FT LGTH TOL +.1250 IN -.0000 IN SHAPE - ROUND FINISH - STRAIGHT EXACT LENGTHS OD .3750 +.0030 -.0030 ID WALL .0490 +.0030 -.0030	5,508 FT	12/02/11 <i>and</i> <i>12/06/01</i>

MECHANICAL PROPERTIES					
SAMPLE #	TENSILE STRENGTH (P.S.I.)	YIELD STRENGTH (P.S.I.)	ELONGATION IN 2 INCHES (%)	ROCKWELL HARDNESS	AVERAGE GRAIN SIZE (MM.)
1	46,279	41,074	21		

EXPANSION TEST:

MERCUROSUS NITRATE TEST:

MICRO EXAMINATION:

FLATTENING TEST:

FLARE TEST:

Country of Melt: USA Country of Mfg: USA

FAR BAA ☐ Complies ☐ Cannot Certify Compliance

DFARS BAA ☐ Complies ☐ Cannot Certify Compliance FAR TAA ☐ Complies ☐ Cannot Certify Compliance

NON-DESTRUCTIVE TESTS

EDDY CURRENT TEST: PASS

HYDROSTATIC PRESSURE TEST:

ULTRASONIC TEST:

CHEMICAL COMPOSITION										
ALLOY: 6061		HEAT:		TRACEABILITY #: 546244						
				RAW MATL VEND: PT19193 - Kaiser Aluminum						
	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Other - Elements Al	
MIN.	0.40		0.15		0.80	0.04			Each	Tot.
MAX.	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	0.05	0.15
										Rem.

We hereby certify that the foregoing results are correct, that the material complies with the requirements of the above specifications and purchase order and that the test reports represent the actual attributes of the items furnished on this order. During the manufacturing, testing and inspection, the product did not come into direct contact with mercury or any of its compounds, nor with any mercury containing device employed a single boundary containment.

BY: Art Onaitis

12/02/11



PACKING SLIP

ORDER NO.: 60472166 FROM: CRAN PAGE 3

CUST NUMBER: 1203820 NET WGT: 75.225 REQ.DATE: 05/30/12 CONFIRMED
SOLD TO: SHIP TO:
DART AEROSPACE LTD DART AEROSPACE LTD
1270 ABERDEEN ST 1270 ABERDEEN ST
HAWKESBURY ON HAWKESBURY ON
CANADA CN K6A 1K7 ONTARIO CANADA CN K6A 1K7
SALESPERSON: DONNA SMALLEY DISTRICT: CRANBURY
TERMS: NET 30 DAYS 27 ENGLEHARD DRIVE
F.O.B.: SHIPPING POINT MONROE TWP NJ 08831
CUST ORD NO.: PO17026
VIA: COMMON CARRIER
FREIGHT: PREPAID
RELEASE NO.:
RECEIVING PHONE:

"TW Metals MSDS data is available on our web site at www.twmetals.com. MSDS data can be found under the Technical Resources Tab, Product Statistics & Data and the TW Metals MSDS's heading. If you do not have web site access you may telephone 610-458-1300 and we will mail or fax a copy of our current MSDS data to your location."

"CERTIFICATE OF CONFORMANCE"

"TW Metals certifies that the material supplied on this purchase order and contained in the heat/lot number referenced above has been manufactured, inspected, and tested in accordance with the material specification. These records are on file at TW Metals. Packaging material for shipments to Europe and China consists of manufactured wood products and complies with the European emergency measures for coniferous non-manufactured wood packing material"

Electronically Generated Certificate-Valid without signature Date: 5/29/12

These commodities have been exported from the United States in accordance with the U.S. export control laws, export administrations regulations. Diversion contrary to U.S. law prohibited.

THANK YOU FOR THIS ORDER

TERMS AND CONDITIONS APPLICABLE TO THE SALE OF THESE PRODUCTS ARE SET FORTH ON THE REVERSE SIDE FOR YOUR CAREFUL REVIEW.



PACKING SLIP

ORDER NO.: 60472166 FROM: CRAN PAGE 2

CUST NUMBER: 1203820 **NET WGT:**
SOLD TO:
DART AEROSPACE LTD
1270 ABERDEEN ST
HAWKESBURY ON
CANADA

75.225 REQ.DATE: 05/30/12 CONFIRMED
SHIP TO:
DART AEROSPACE LTD
1270 ABERDEEN ST
HAWKESBURY ON
ONTARIO CANADA

CN K6A 1K7

CN K6A 1K7

SALESPERSON: DONNA SMALLEY
TERMS: NET 30 DAYS
F.O.B.: SHIPPING POINT
CUST ORD NO.: PO17026

DISTRICT: CRANBURY
VIA: COMMON CARRIER
FREIGHT: PREPAID
RELEASE NO.:
RECEIVING PHONE:

LINE ITEM DESCRIPTION

WIDTH

LENGTH

		PACK INFO			
AREA	TYPE OF PKG	PKGS	GRS WEIGHT	WIDTH	LENGTH HGHT
B	CARTON	1.000	175.000		12.5000
B	CARTON	1.000			24.5000
		2.000	175.000		

BY: SF
RT 000-

UNLOAD TYPE: NONE SPECIFIED

DATE SHIPPED _____

DATE FILLED _____

THANK YOU FOR THIS ORDER

TERMS AND CONDITIONS APPLICABLE TO THE SALE
OF THESE PRODUCTS ARE SET FORTH ON THE
REVERSE SIDE FOR YOUR CAREFUL REVIEW.

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
2425 STEVENS DRIVE
RICHLAND, WA 99352

KAISER ALUMINUM
MATERIAL CERTIFICATION
PRECISION TUBE CO
287 WISSAHICKON AVENUE
N. WALES, PA 19454

PAGE 1

PRECISION TUBE CO
N. WALES

PA 19454 PT19193

SOLD TO

PURCHASE ORDER

10/26/11

DATE PRINTED

SOLD TO

PURCHASE ORDER

DATE PRINTED

SPIRIT-352567

5.4#/PC +.500#/-0#

CUSTOMER PART, NUMBER

1.312 OD X .085 WALL ESRT
DESCRIPTION

313088-001

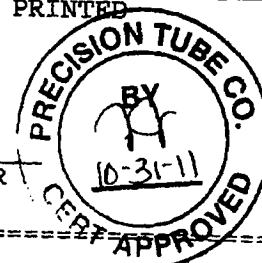
RELEASE-ITEM

50751 191

LOT

6061-0

ALLOY/TEMPER



MECHANICAL PROPERTY RESULTS

REFERENCE	SAMPLE#	UTS (KSI)	YTS (KSI)	%Elong in 2"	HARDNESS	CONDUCT.	BEND
50751 191	0001 001	16.7	4.6	29.1	NA N/A	N/A	N/A
50751 191	0001 002	16.5	4.9	29.1	NA N/A	N/A	N/A
50751 191	0001 003	17.0	4.8	29.7	NA N/A	N/A	N/A
50751 191	0001 004	16.7	4.9	29.6	NA N/A	N/A	N/A
50751 191	0001 005	16.7	4.9	29.2	NA N/A	N/A	N/A
50751 191	0001 006	16.3	4.9	29.1	NA N/A	N/A	N/A
50751 191	0001 007	16.7	5.0	30.5	NA N/A	N/A	N/A
50751 191	0001 008	18.0	5.1	30.3	NA N/A	N/A	N/A
50751 191	0001 009	16.3	4.5	29.8	NA N/A	N/A	N/A
50751 191	0001 010	16.8	4.9	29.7	NA N/A	N/A	N/A
50751 191	0001 011	16.0	5.0	27.9	NA N/A	N/A	N/A
50751 191	0001 012	16.7	4.6	29.9	NA N/A	N/A	N/A
50751 191	0001 013	16.8	4.7	29.9	NA N/A	N/A	N/A
50751 191	0001 014	16.9	4.8	29.9	NA N/A	N/A	N/A
50751 191	0001 015	16.4	4.6	29.1	NA N/A	N/A	N/A
50751 191	0001 016	16.7	4.7	29.1	NA N/A	N/A	N/A
50751 191	0001 017	16.7	4.7	30.3	NA N/A	N/A	N/A

Applicable Requirements:

ASTM-B241-02
ASTM-B221-08
ASTM-B345-02
AMS-QQ-A-200/8 TYPE 1
UNS#96061
ACTUAL CHEMISTRY
Also conforms to EN 10204 3.1

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgment form. Any warranty is limited to that shown on Kaiser's general terms & conditions of sale. Test reports are on file, subject to examination.

Domestic Melt Source

Ron Walls
General Manager

Ron Walls

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
2425 STEVENS DRIVE
RICHLAND, WA 99352

KAISER ALUMINUM
MATERIAL CERTIFICATION
PRECISION TUBE CO
287 WISSAHICKON AVENUE
N. WALES, PA 19454

TWIN METALS		REPORTS
TEST	DEC - 6 2011 PAGE	
ACCEPTABLE BY		

PRECISION TUBE CO
N. WALES
SOLD TO

PA 19454 PT19193
PURCHASE ORDER

10/26/11
DATE PRINTED

SOLD TO

PURCHASE ORDER

DATE PRINTED

SPIRIT-352567

5.4#/PC +.500#/-0#
1.312 OD X .085 WALL ESRT

CUSTOMER PART NUMBER

DESCRIPTION

313088-001
RELEASE-ITEM

50751 191
LOT

6061-O
ALLOY/TEMPER

MECHANICAL PROPERTY RESULTS

REFERENCE	SAMPLE#	UTS (KSI)	YTS (KSI)	%Elong in 2"	HARDNESS	CONDUCT.	BEND
50751 191	0001 018	17.0	4.9	31.1	NA N/A	N/A	N/A
50751 191	0001 019	16.9	4.8	29.9	NA N/A	N/A	N/A
50751 191	0001 020	16.8	4.8	30.2	NA N/A	N/A	N/A
50751 191	0001 021	16.5	4.6	29.4	NA N/A	N/A	N/A
50751 191	0001 022	16.7	4.8	30.4	NA N/A	N/A	N/A
50751 191	0001 023	16.7	5.0	28.9	NA N/A	N/A	N/A
50751 191	0001 024	16.8	4.9	29.6	NA N/A	N/A	N/A

CHEMICAL COMPOSITION (WT%), ALUMINUM REMAINDER

6061 LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Others
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	Ea Tot
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.05 .15
												0.00 .0

Cast No	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Others
F69627 01	.61	.29	.21	.04	1.00	.07	.04	.03	.00	.00	.00	Ea Tot
												.01 .02

Applicable Requirements:

ASTM-B241-02
ASTM-B221-08
ASTM-B345-02
AMS-QQ-A-200/8 TYPE 1
UNS#96061

ACTUAL CHEMISTRY

Also conforms to EN 10204 3.1

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgment form. Any warranty is limited to that shown on Kaiser's general terms & conditions of sale. Test reports are on file, subject to examination.

Domestic Melt Source

Ron Walls
Ron Walls General Manager

SIGNED

Control No: 145176



Precision Tube Company

A Mueller Industries Company

287 Wissahickon Avenue

North Wales, Pennsylvania 19454

Phone: (215) 699-5801 - Fax: (215) 699-0761

Quality Management System Registered to ISO 9001: 2008
CERTIFICATION AND TEST REPORTS

CUSTOMER PURCHASE ORDER NO.	CUST. ORD. NO.	PRECISION TUBE P/N
49261460 LINE 002	334821	24A031250580005

SOLD TO TW METALS
SUITE 204
760 CONSTITUTION DR.
EXTON, PA 19341

SHIP TO TW METALS - CAROL STREAM
235 TUBEWAY
CAROL STREAM, IL 60188

QUANTITY ORD.	DESCRIPTION	QTY SHIPPED	DATE SHIPPED
3,408 FT	METAL - 6061 ALUM TEMPER - T6 SPEC - AMS 4082P ASTM-B-210-04 AMS-WW-T-700/6B LENGTH - 12 FT LGTH TOL +.1250 IN -.0000 IN SHAPE - ROUND FINISH - STRAIGHT EXACT LENGTHS OD .3125 +.0030 -.0030 ID WALL .0580 +.0040 -.0040	3,552 FT	10/27/11



12/06/01

MECHANICAL PROPERTIES					
SAMPLE #	TENSILE STRENGTH (P.S.I.)	YIELD STRENGTH (P.S.I.)	ELONGATION IN 2 INCHES (%)	ROCKWELL HARDNESS	AVERAGE GRAIN SIZE (MM.)
1	45,669	40,583	15		

EXPANSION TEST:
MERCURIOS NITRATE TEST:
MICRO EXAMINATION:

FLATTENING TEST:
FLARE TEST:

Country of Melt: USA Country of Mfg: USA FAR BAA ☒ Complies ☐ Cannot Certify Compliance
DFARS BAA ☒ Complies ☐ Cannot Certify Compliance FAR TAA ☒ Complies ☐ Cannot Certify Compliance

NON-DESTRUCTIVE TESTS

EDDY CURRENT TEST: PASS
HYDROSTATIC PRESSURE TEST:
ULTRASONIC TEST:

CHEMICAL COMPOSITION										
ALLOY: 6061	HEAT:	TRACEABILITY #: 546273								
		RAW MATL VEND: pt18747 - Kaiser Aluminum								
	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Other - Elements Al	
MIN.	0.40		0.15		0.80	0.04			Each	Tot.
MAX.	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	0.05	0.15

We hereby certify that the foregoing results are correct, that the material complies with the requirements of the above specifications and purchase order and that the test reports represent the actual attributes of the items furnished on this order. During the manufacturing, testing and inspection, the product did not come into direct contact with mercury or any of its compounds, nor with any mercury containing device employed a single boundary containment.

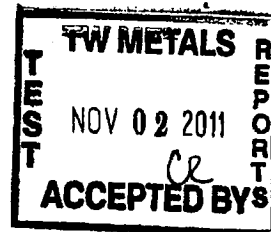
BY: Art Onaitis

10/27/11

2

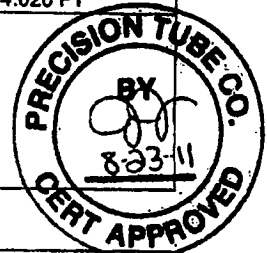
KAISER ALUMINUM FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
2425 STEVENS DRIVE
RICHLAND, WA 99352



CERTIFIED TEST REPORT
<http://Certs.KaiserAluminum.com>

CUSTOMER PO NUMBER: PT18747-1		CUSTOMER PART NUMBER: SPIRIT-352567		PRODUCT DESCRIPTION: 1.312 OD X .085 WALL ESRT	
KAISER ORDER NUMBER: 312734	LINE ITEM: 001	SHIP DATE: 08/19/2011	KAISER LOT NUMBER: 50751 189	ALLOY: 6061	TEMPER: O
WEIGHT SHIPPED: 15627.000 LB	QUANTITY: 2790.000 PCS	BL NUMBER: 003649	DIAM/DAF/THKNS:	WIDTH:	LENGTH: 14.020 FT
SHIP TO: PRECISION TUBE CO 287 WISSAHICKON AVENUE N. WALES, PA 19454 USA			SOLD TO: PRECISION TUBE CO 287 WISSAHICKON AVENUE N. WALES, PA 19454 USA		



Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	%Elong in 2	HARDNESS	CONDUCT.	BEND
50751 189	0001	001	17.0	4.7	26.4	NA N/A	N/A	N/A
50751 189	0001	002	16.8	4.7	27.8	NA N/A	N/A	N/A
50751 189	0001	003	17.0	4.9	28.3	NA N/A	N/A	N/A
50751 189	0001	004	16.4	4.5	28.1	NA N/A	N/A	N/A
50751 189	0001	005	16.4	4.9	27.8	NA N/A	N/A	N/A
50751 189	0001	006	17.0	4.9	27.6	NA N/A	N/A	N/A
50751 189	0001	007	15.9	4.5	28.0	NA N/A	N/A	N/A
50751 189	0001	008	16.3	4.9	28.3	NA N/A	N/A	N/A
50751 189	0001	009	16.9	4.7	27.8	NA N/A	N/A	N/A
50751 189	0001	010	17.0	4.9	28.9	NA N/A	N/A	N/A
50751 189	0001	011	16.5	4.8	28.9	NA N/A	N/A	N/A
50751 189	0001	012	17.0	4.8	28.3	NA N/A	N/A	N/A
50751 189	0001	013	17.0	4.7	29.4	NA N/A	N/A	N/A
50751 189	0001	014	16.6	4.8	27.3	NA N/A	N/A	N/A
50751 189	0001	015	16.7	4.7	28.2	NA N/A	N/A	N/A
50751 189	0001	016	16.7	4.9	27.7	NA N/A	N/A	N/A

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Ron Walls,

Ron Walls

Plant Serial: 00005624

Kaiser Order Number: 312734

Line Item: 001

C

KAISER ALUMINUM FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
2425 STEVENS DRIVE
RICHLAND, WA 99352

Best in Class

CERTIFIED TEST REPORT
<http://Certs.KaiserAluminum.com>

Chemical Composition (wt%), Aluminum Remainder

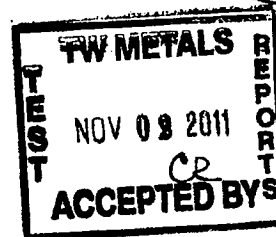
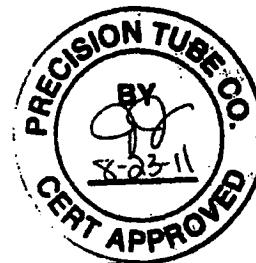
LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Sn	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	.0
F69521	.59	.28	.24	.05	.99	.06	.03	.02	.00	.00	.00	.01	.02
F69528	.62	.33	.24	.06	.99	.08	.05	.02	.00	.00	.00	.02	.03
F69285	.59	.25	.21	.06	.98	.06	.05	.02	.00	.00	.00	.01	.02

Applicable Requirements:

ASTM-B241-02 ASTM-B221-08 ASTM-B345-02 AMS-QQ-A-200/8 TYPE 1 UNS#96061 ACTUAL
CHEMISTRY Also conforms to EN 10204 3.1

Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA



CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Ron Walls,

Ron Walls

Plant Serial: 00005624

Kaiser Order Number: 312734

Line Item: 001

✓

Benteler Steel/Tube GmbH
Postfach 13 40
33043 Paderborn
Deutschland

Tel.: +49.5254.81-0 Fax: +49.5254.13666

BENTELER

Steel/Tube

ABNAHMEPRÜFZEUGNIS EN 10204-3.1

INSPECTION CERTIFICATE EN 10204-3.1
CERTIFICAT DE RECEPTION EN 10204-3.1
EN 10204:2005-01

Benteler Steel/Tube GmbH · Postfach 1340 · 33043 Paderborn · Deutschland

TW Metals
760 Constitution Drive
EXTON, PA 19341
USA

Dokument-Nr.: 41-680543/001/P
Document No.: 41-680543/001/P

No. du document:

Kunden-Bestell-Nr.: 11-11051 TW M49266125
Purchase Order No.: 11-11051 TW M49266125

No. de commande du client:

Benteler Auftrags-Nr.: 1569220
Benteler Order No.: 1569220

No. de commande Benteler:

Versandanzeigen-Nr.: 4186485
Dispatch Note No.: 4186485
No. d'avis d'expédition:

Produkt: NAHTLOSE STAHLROHRE
Product: SEAMLESS STEEL TUBES
Produit: TUBES D'ACIER SANS SOUDURE

Lieferbedingungen: AMS-T-6736B Type 1, ASTM-A 519-2006, MIL-T-6736B Type 1
Terms of delivery: AMS-T-6736B Type 1, ASTM-A 519-2006, MIL-T-6736B Type 1
Conditions de livraison: AMS-T-6736B Type 1, ASTM-A 519-2006, MIL-T-6736B Type 1

Maße - Toleranzen: AMS 2253E-83, Aircraft Type, Seamless, Cold Finished
Dimensions-tolerances: AMS 2253E-83, Aircraft Type, Seamless, Cold Finished
Dimensions-tolerances: AMS 2253E-83, Aircraft Type, Seamless, Cold Finished

Stahlsorte: GRADE 4130, AMS 6360L and AMS 6371J
Steel grade: GRADE 4130, AMS 6360L and AMS 6371J
Nuance d'acier: GRADE 4130, AMS 6360L and AMS 6371J

Lieferzustand: N
Delivery condition: N
État de livraison: N

Produktkennzeichnung: FSD: BENTELER AMS-T-6736 B 1-MIL-T-6736 B 1-4130 N HEAT-NO. CD AQ S DIMENSIONS WA
Product marking: FSD: BENTELER AMS-T-6736 B 1-MIL-T-6736 B 1-4130 N HEAT-NO. CD AQ S DIMENSIONS WA
Marquage du produit: FSD: BENTELER AMS-T-6736 B 1-MIL-T-6736 B 1-4130 N HEAT-NO. CD AQ S DIMENSIONS WA

AEZ = Ätzintensivbeschriftung, Etching ink marking, Gravure à l'encre
couleur · LK = Laserkennzeichnung, Laser marking, Marquage laser
d'encre · FS = Farbkennzeichnung, colour marking, marquage par couleur · FS = Farbschablonierung, point stencilling, marquage par peinture · FSD = Farbstrahlendrucker, Colour jet printer, Imprimante à jet d'encre de couleur · PK = Laserkennzeichnung, Laser marking, Marquage laser · PK = Etikettenkennzeichnung, tag marking, marquage sur étiquette · PS = Prägestempel, die stamp, marquage par poinçonnage · TS = Tintenstrahlkennzeichnung, ink jet spray marking, imprimante à jet d'encre

anf 12/06/01

Benteler Steel/Tube GmbH
Postfach 13 40
33043 Paderborn
Deutschland
Tel.: +49.5254.81-0 Fax: +49.5254.13666

BENTELER

Steel/Tube

ABNAHMEPRÜFZEUGNIS EN 10204-3.1
INSPECTION CERTIFICATE EN 10204-3.1
CERTIFICAT DE RECEPTION EN 10204-3.1

41-680543/001/P

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Pos.	Stück	Maße	Länge	Gewicht	Schmelzen-Nr.	Prüfdruck	Rohr-Nr.-Gruppe	Vielfachlängen
Item	Number	Dimensions	Length	Weight	Heat No.	Test pressure	Tube number group	Multiple lengths
Poste	Nombre	Dimensions	Longueur	Poids	No. de coulée	Pression d'épreuve	Série de no. des tubes	Longueurs multiples
0024	197	0.750" O.D. * 0.035"	feet	lbs				
		17 FT - 24 FT	4724,41	1314	568913			

Schmelzenanalyse [%] / Heat analysis [%] / Analyse sur coulée [%]

Pos.	Schmelzen-Nr.	C	SI	MN	P	S	CR	MO	NI	CU
Item	Heat No.									
Poste	No. de coulée									
0024	568913	0,310	0,240	0,55	0,006	0,003	0,91	0,17	0,09	0,14

Produktanalyse [%] / Product analysis [%] / Analyse sur produit [%]

Pos.	Schmelzen-Nr.	C	SI	MN	P	S	CR	MO	NI	CU
Item	Heat No.									
Poste	No. de coulée									
0024	568913	0,310	0,230	0,56	0,007	0,003	0,91	0,16	0,09	0,14

Prüfergebnisse / Test results / Résultats des essais

Die Rohre wurden zerstörungsfrei geprüft:
The tubes are non destructive tested:

Les tubes ont passé un essai non destructif:

ET-test: acc. to ASTM-A 450; ET - Test method: acc. to ASTM-E 309; for imperfections;
ET-test: ET with rotating pancake coils; according to EN 10246-3; imperfections;
Notch depth: 0,30 mm; notch width < = notch depth; notch length min. 2 x transducer width (max. 50 mm)

PASSED

Augensichtkontrolle:

Visual inspection:
Examen visuel:

PASSED

Materialverwechslungsprüfung:

Material conformity test:
Vérification de la nuance:

PASSED

Maßkontrolle:

Dimensions examination:
Vérification des dimensions:

PASSED

Ergebnisse der mechanischen Prüfung / Results of mechanical testing / Résultats des essais mécaniques

Die Probenahme erfolgte an Vielfachlängen.
The sampling was carried out on multiple lengths.

L'échantillonnage était réalisé aux longueurs multiples.

Handwritten signature and date
12.06.01

ABNAHMEPRÜFZEUGNIS EN 10204-3.1
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Zugversuch längs Vollprobe / Tensile test longitudinal Full section test specimen / Essai de traction longitudinale Eprouvette a section complete

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Pos. Proben-Nr. Schmelzen-Nr. Probenabmessung Streckgrenze Zugfestigkeit Dehnung
Item Specimen No. Heat No. Specimen dimensions Yield strength Tensile strength Elongation

Poste No. de l'éprouvette No. de coulée Dimensions de l'éprouv. Limite élastique Résistance à la traction Allongement
Einschnürung
Area reduction
Coefficient de striction

Anforderungen
Requirements

Exigences mm Rp 0,2 % Rm A2" 1. Formel

0024 000001 568913 19,05 X 0,95 786 N/mm² MIN 517 N/mm² MIN 655 % MIN 12 1. Formula

0024 000002 568913 19,05 X 0,95 801 841 20

0024 000003 568913 19,05 X 0,95 801 829 20

0024 000004 568913 19,05 X 0,95 773 830 20

0024 000005 568913 19,05 X 0,95 793 833 20

0024 000006 568913 19,05 X 0,95 810 828 20

0024 000006 568913 19,05 X 0,95 801 834 20

Randentkohlung / Surface decarburization / Décarburation superficielle
Pos. / Item / Poste: 0024

acc. MIL-T-6736B / AMS-T-6736B, decarburization outside max. 0.20 mm, decarburization outside + inside max. 0.254 mm

Vermerk / Remark / Remarque

Pos. / Item / Poste: 0024

Certificate remarks: The steel grade corresponds to MIL-T-6736B, AMS 6360 and AMS 6371J, material free from mercury contamination, FAR BAA: 52.225-1 CANNOT COMPLY, DFARS BAA: 252.225-7001 CAN COMPLY, FAR TAA: 52.225-5 CAN COMPLY, Country of origin of the material and heat: Germany; see appendix page 1 of 1

Pos. / Item / Poste: 0024

Macroscopic examination: acc. to ASTM-E 381

Pos. / Item / Poste: 0024

Magnetic particle inspec.: acc. to AMS 2301 G/2640, on prematerial

Pos. / Item / Poste: 0024

Grain size determination: acc. to ASTM-E 112, Grain size 5 and finer, Longitudinal structure microscopy, On prematerial

Verkäufer(in) / Salesman/ woman in charge / Personne chargée : Mr Boeger, Tel.: 05254/81-4321, Fax: 4395

Boeger
12/06/01

Abnahmeprüfzeugnis EN 10204-3.1 / Anhang
Inspection Certificate EN 10204.3.1 / appendix
Certificat de réception EN 10204-3.1 / appendice

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Page: 1 of 1
Page: de

Halbzeuguntersuchung: Stahlsorte 4130 / Semi finished product examination: grade 4130 / Produit semi-fini: nuance 4130

Schmelzen-Nr. Heat No. Coulée No.	Position Item Poste	Korngröße Grain size Grosseur de grain (ASTM-E 112)	Härbarkeit (min. Anforderungen) Hardenability (min. requirements) Trempeabilité (exigence min.) (ASTM-A 255)		Magnetpulverprüfung Magnetic particle inspection Essai à la poudre magnétique (AMS 2301G / 2640J)		Makroätzung Macrostructure test Essai de macrostructure (ASTM-E 381)		
			J(5/16") min. 35 HRC	J(8/16") min. 28 HRC	F max. 0,34	S max. 0,25	max. S 2	max. R 1	max. C 2
568913	0024	9 - 10	39	31	0,029	0,020	S 2	R 1	C 2
Decarburization Depth		Outside 0,000 mm Inside 0,020 mm							

Der Stahl ist frei von Quecksilberverunreinigungen. / The steel is free of mercury contamination. / L'acier est libre des contaminations de mercure.

Paderborn Schloß Neuhaus, 23.02.2012
Tel.: (0)5254.81-1992 Fax: (0)5254.81-1991

Abnahmebeauftragter
Inspection representative
Contrôleur

Thomas Gollan

12/06/01

Benteler Steel/Tube GmbH
Postfach 13 40
33043 Paderborn
Deutschland
Tel.: +49.5254.81-0 Fax: +49.5254.13666

BENTELER 

Steel/Tube

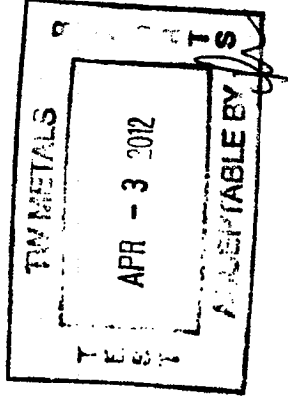
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Steel/Tube GmbH

Abnahmebeauftragter
Inspection representative
Contrôleur

THOMAS GOLLAN / TEM

Es wird bestätigt, daß die gelieferten Erzeugnisse den techn. Lieferbedingungen des Auftrages entsprechen. Dieses Dokument wurde mittels EDV erstellt und ist ohne Unterschrift rechtsgültig.
We certify that the supplied products comply with the order specification. This document was prepared by means of electronic data processing and is valid without signature.
Nous attestons que les produits livrés sont conformes aux stipulations de la commande. Ce document a été établi par traitement électronique de l'information et est valide sans signature.

Paderborn Schloß Neuhaus, 23.02.2012, TEL.: 05254.81-1767 FAX: 05254.81-1752



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO17026

Purchase Order Date 5/22/12

PO Print Date 5/22/12

Page Number 1 of 2

Order From :

VU-TWM001

TW METALS
PO BOX 933014
ALTANTA, GA 31193-3014
US

Contact Name

Vendor Phone 585 768 5600

Vendor Fax 585 768 5601

Vendor Account Nbr

Buyer

Chantal Lavoie

Requisition Nbr

Tax Resale Nbr 10127-2607

Terms

Net 30

Currency

USD

FOB

Destination-Collect

Ship To :

DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA



Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	M6061T6T0.375W.049 04	6061-T6 RD Tube .375 x.049W	5/30/12 Yes	108.00 f		\$2.5000	\$270.00
		Special Inst:	MATERIAL: 6061-T6 OR 6061-T62 TUBING PER WW-T-700/6 OR AMS 4080 OR AMS 4082 OR QQ-A-200/8 OR QQ-A- 225/8				
2	M6061T6T0.3125W.058 03	ALUM TUBE .3125 x .058w	5/30/12 Yes	200.00 f	04	\$4.1000	\$820.00
		Special Inst:	MATERIAL: 6061-T6 OR 6061-T62 TUBING PER WW-T-700/6 OR AMS 4080 OR AMS 4082 OR QQ-A-200/8 OR QQ-A- 225/8				
3	M4130NT0.750W.035 033	4130 RD TUBE .750 X .035W	5/30/12 Yes	200.00 f	216	\$7.5000	\$1,500.00

Handwritten signatures and dates:
4/4/30
4/4/30

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required when applicable

Change Nbr: 1

Change Date: 5/22/12



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

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TW METALS
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ALTANTA, GA 31193-3014
US

Contact Name

Vendor Phone 585 768 5600

Vendor Fax 585 768 5601

Vendor Account Nbr

Buyer

Chantal Lavoie

Requisition Nbr

Tax Resale Nbr 10127-2607

Terms

Net 30

Currency

USD

FOB

Destination-Collect

Special Inst:

MATERIAL: AISI 4130N STEEL TUBING
AS PER
MIL-T-6736 OR AMS 6371/6360/6361/6362
6373/6374

PO Total:

\$2,590.00

MATERIAL CERTIFICATION
REQ'D UPON DELIVERY

Change Nbr: 1

Change Date: 5/22/12

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required when applicable